

FEB 22 2002

Gwen Zervas
New Jersey Department of Environmental Protection
Bureau of Federal Case Management
401 East State Street
P.O. Box 028
Trenton, New Jersey 08625-0028

Re: Draft Scope of Work for Additional Soil Borings in the Warehouse Area of the
Ventron/Velsicol Superfund Site

Dear Ms. Zervas:

As requested, please find enclosed a draft Scope of Work, prepared by EPA, for additional soil borings in the warehouse area of the Ventron/Velsicol Superfund Site. The recommended investigation is intended to enhance the delineation of mercury contamination in the area, and to evaluate the presence or absence of mercury DNAPL.

If you have any questions, please contact me at (212) 637-4976.

Sincerely,

Seth Ausubel
Remedial Project Manager
New Jersey Remediation Branch

Enclosure

BASED ON
THIS INFO

← YES IT DETECTS
TO WHAT SHOULD BE
VED AT THE SITE, BUT
IS THE METHOD ACCEPTABLE?
EPA'S STANDARD IS NPSH



Draft Scope of Work for Additional Soil Borings to Enhance the Delineation of Mercury Contamination in the Warehouse Area of the Ventron/Velsicol Superfund Site

The following is recommended primarily to obtain additional evidence that can be used to evaluate the presence or absence of mercury DNAPL in the warehouse area of the Ventron Site. Mercury DNAPL may occur in soils as beads of elemental mercury. While borings that are absent of mercury DNAPL do not guarantee that it is absent everywhere, the recommended investigation would help delineate mercury contamination in the surface and subsurface soils, including potential migration pathways, with sufficient certainty to evaluate remedial alternatives for the Feasibility Study. The details of the proposed soil-boring program given here augment the methods of investigation for soil and groundwater sampling that EPA outlined in an e-mail from Seth Ausubel to Gwen Zervas dated Jan. 18, 2002. Also, please refer to an e-mail dated Jan. 31, 2002 for a summary of mercury DNAPL behavior and occurrence at several NPL sites.

The attached map shows the proposed locations of 21 proposed soil borings. In addition to evaluating the presence of mercury DNAPL contamination, the soil-boring program is also intended to address several other related issues, which have been recently discussed by NJDEP and EPA:

1. Delineation of deeper contamination in off-site soils along Ethel Blvd. (Boring numbers 1, 2, 3, 4, 5, and 6).
2. Delineation of contamination in areas where high mercury levels were found in prior phases of the Remedial Investigation. (Boring numbers 7, 8, 9, 10, 11, 12, and 21).
3. Delineation of contamination along the perimeter of the Wolf Warehouse. (Boring numbers 13, 14, 15, 16, 17, 18, 19, and 20).
4. Additional evidence to support or counter the apparently linear trend of the deepest part of the sand unit, and evaluate the possibility that this feature may provide a pathway for mercury migration. (Boring numbers 8, 9, 17, and 20).

As mentioned in the e-mail noted above, soil borings should be drilled until the varved clay unit or the undifferentiated fine-grained deposits are encountered, or to refusal. Soil samples should be collected for lab analysis at the same interval that was used during the drilling of the monitoring wells (about every 2 feet). In addition to lab analysis, soil samples should be analyzed in the field with a mercury-vapor meter, and the results submitted along with the lab analytical results.

Because the potential exists for possible cross contamination of samples, effective decontamination procedures for equipment should continue to be used during the program. Furthermore, since the soil borings may allow for the development of pathways for downward transport of elemental mercury, the methodology selected for the boring program should

minimize the potential for contaminant transport.

If elemental mercury is observed in a soil sample above the "meadow mat" or other shallow (near-surface) confining unit, a surface casing should be installed that will seal off that zone. The boring should be continued within the casing. All borings should be grouted promptly upon completion using approved NJDEP specifications. Consideration should be given to using a method that will grout the hole during the removal of the rods.

